

DERWENT- 1994-270641

ACC-NO:

DERWENT- 199433

WEEK:

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**TITLE:** Sintered hard alloys used as cutting tools - contains tungsten carbide, titanium niobium carbonitride or zirconium niobium carbonitride, tungsten and cobalt

**INVENTOR:** MASKHULIYA, L G; ORDANYAN, S S ; PETROV, S S

**PATENT-ASSIGNEE:** METALLOKERAMIKA CONSTR TECHN BUR[METAR]

**PRIORITY-DATA:** 1991SU-4944693 (June 26, 1991)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
RU 2007491 C1	February 15, 1994	N/A	004	C22C 029/02

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
RU 2007491C1	N/A	1991SU-4944693	June 26, 1991

**INT-CL (IPC):** C22C029/02

**ABSTRACTED-PUB-NO:** RU 2007491C

**BASIC-ABSTRACT:**

These alloys contains (vol.%) : 38.2-64.5 WC, 21.5-38.2 of a refractory metal carbonitride (i.e., Nb), 1.3-3.4 W and Co the remainder. The alloys are novel in that the refractory metal carbonitride may be a Ti-Nb carbonitride having a compsn. corresponding to  $Ti_{1-x}Nb_xC_{0.5}N_{0.5}$  or a Zr-Nb carbonitride having a compsn. corresponding to  $Zr_{1-x}Nb_xCo_{0.5}N_{0.5}$  where  $X = 0.2-0.3$ . Under these conditions, the ratio of the vol. contents of carbonitride to WC is 1:(1-3), and the same ratio for the W and carbonitride is equal to 0.06-0.09.

**USE** - Is used in cutting tool mfr.

**ADVANTAGE** - A sintered hard alloy is obtd. that has improved cutting durability.

**CHOSEN-DRAWING:** Dwg.0/0

**DERWENT-CLASS:** L02 M26